

CLAIMS

1. Data transmission system comprising an antenna (300, 328, 600) provided with at least a monopole radiating  
5 element (302, 500, 502, 600, 602) mounted on a conductive earth plane (306, 504, 606), characterized in that the radiating element (302, 500, 502, 600, 602) is connected to the conductive surface of the earth plane (306, 504, 606) via a mast (304, 608, 610) located near an edge of said  
10 conductive surface.
2. Transmission system according to Claim 1, characterized in that, since the radiating element (302, 500, 502, 600, 602) is connected to the conducting surface  
15 of the earth plane (306, 504, 606) via a mast (304, 608, 610) fastened to the radiating element (302, 500, 502, 600, 602) at its point of excitation, this point of excitation is off-centred with respect to the surface of the earth plane (306, 504, 606).  
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3. System according to Claim 1 or 2, characterized in that the earth plane (306, 504, 606) has at least one of its dimensions, such as its length, its width and/or its height, of the order of a multiple of  $\lambda/2$  where  $\lambda$  is a  
25 wavelength used by the antenna (300, 328, 600).
4. System according to one of Claims 1, 2 and 3 characterized in that it includes means so that its reflection coefficient is less than -10 dB in the operating  
30 frequency band.
5. System according to one of the preceding claims, characterized in that it includes a first compact radiating element (500, 600) and a second compact radiating element  
35 (502, 602) mounted on the same conductive earth plane (504, 606) via masts located on separate edges of said earth plane.

6. System according to one of the preceding claims, characterized in that the antenna (300, 328, 600) is provided with a hollowed-out radiating element.

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7. System according to one of the preceding claims, characterized in that the earth plane (306, 504, 606) of the antenna (300, 328, 600) corresponds to one face of a digital terrestrial television decoder.

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8. System according to one of the preceding claims, characterized in that it includes means for receiving and decoding transmitted signals within the context of digital terrestrial television within the frequency band lying between 470 and 862 MHz.

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9. System according to one of the preceding claims, characterized in that the antenna includes means for pivoting about a rotation mechanism with respect to the surface of the earth plane.

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